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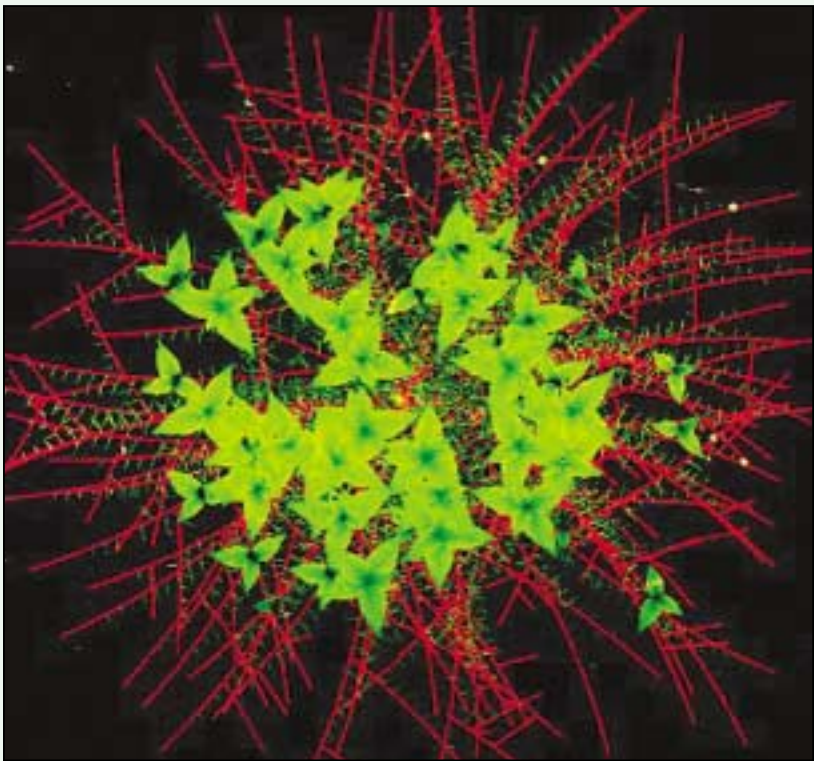
Friday, August 27, 2004

Vol. 29, No. 34

# JGI launches critter-cal sequence

By David Gilbert  
NEWSLINE STAFF WRITER

Emerging from the soil and water of toxic waste sites and from the depths of the oceans, micro- and macroscopic creatures are now lining up to have their genetic fortunes told through the Joint Genome Institute's Community Sequencing Program (CSP). Joining them will be an antibiotic-resistant strain of the food-borne pathogen *Staphylococcus*, along with a rich diversity of other terrestrial and aquatic organisms. These and others are poised to close important gaps in our understanding of the tree of life and keep JGI's sequencers humming 24/7 over the next



DJ COVE (LEEDS, UK)

A color-altered colony of twenty-eight-day-old *Physcomitrella gametophyte* showing the gametophores in green and the protonemal filaments in red.

year.  
"There's the perception that the  
See SEQUENCING, page 8

# Optical sensor offering greater degree of freedom ready for commercialization

By Leslie Schwartz  
NEWSLINE STAFF WRITER

Graduate students at Syracuse University College of Law Technology Transfer Research Center in upstate New York recently joined forces with Lab employees from the Industrial Partnerships and Commercialization Office (IPAC) to market a new LLNL technology, the Six Degrees of Freedom (SixDOF) Sensor, to the commercial sector. This new technology attaches to computer-controlled machines, enabling them to operate in all six degrees of freedom. The non-contact optical sensor is estimated to be about 200 times faster and 25 times more accurate than the ThreeDOF sensor. It can make manufacturing robots smarter, eliminate the need to train machines, and is inexpensive and more accurate compared to competing technologies. The small, 8.5-cubic-inch device also is flexible in its design and can be made smaller or larger depending on the application, providing businesses and the commercial market with an increased capacity of computer-controlled machines. Former Lab mechanical engineer Charles Vann invented the SixDOF Sensor in 1996 after he modified the design from a National Ignition Facility proposed alignment and diagnostic system and transferred this technology to create the sensor. It

See SENSOR, page 7

# County health officials report dead birds found in the area infected with West Nile Virus

Alameda County Health officials have reported that a dead barn owl found onsite the week of July 26 has tested positive for the West Nile Virus (WNV). "This discovery does not mean that Laboratory employees are at any greater risk than the general population for contracting the virus," according to Laboratory Medical Director Jim Seward. The barn owl was most likely infected elsewhere and simply found onsite. There have been at least three previous instances of other dead birds with WNV reported in Alameda County, according to the county public health department. No human cases of locally acquired WNV have occurred in Alameda County. National health records show that of those who are infected with the virus, 80 percent

See WNV, page 8

# Laboratory bioscience efforts reap rewards

By Charles Osolin  
NEWSLINE STAFF WRITER

Outstanding accomplishments and exceptional performance by members of the Lab's Biology and Biotechnology Research Program (BBRP) and their collaborators were recognized at an awards ceremony Tuesday on the lawn in front of Bldg. 361. Elbert Branscomb, associate director for BBRP, presented awards to three cross-directorate teams whose inventions were recognized by *R&D Magazine* as among the 100 most technologically significant new products of 1992 and 1993. LLNL researchers received a total of 11 R&D 100 awards, known as the "Oscars of Inven-

See AWARDS, page 5



JACQUELINE MCBRIDE/NEWSLINE

BBRP Associate Director Elbert Branscomb (kneeling) gave awards to members of the APDS team. From left, Thomas Metz, John Dzenitis, Bruce Henderer, Richard Langlois, Fred Milanovich, Shanavaz Nasarabadi, Leslie Jones, Steve Brown, Mary McBride, Ujwal Sathyam, Benjamin Hindson, Donald Masquelier, Anne M. Erler and Sally Marie Smith.



Server changes  
in store  
— Page 4



On course  
for safety  
— Page 5



DoD award  
for Saito  
— Page 5





# LAB COMMUNITY NEWS

## Weekly Calendar

Technical Meeting Calendar, page 4

Tuesday  
31

The **2004 CalPERS Long-Term Care** application period ends today. Generally long-term care is not covered by health insurance, disability insurance or Medicare. The program is available to all California public employees and retirees, including University of California employees and their family members. An informational video and application kits regarding the CalPERS Long-Term Care Program are available in the Benefits Office, Bldg. 571, room 1205. For additional information, call the Benefits Office, 2-9955.

...

The **LLESA Apple Computer Networking Group** will meet tonight at 7 p.m. in the LLNL Discovery Center Press Room. Anyone with an interest in Apple computers is welcome to attend. For more information, contact Jim Brnum, 2-6766.

...

The Benefits Office will continue the **brown-bag series** on how to enhance your financial security by participating in the Tax-Deferred 403(b). The next session will be today from 12:15- 1:15 p.m. in Bldg. 571, conference room 2000. Additional sessions will be held on the last working day of each month (excluding November and December) throughout the year. Attendance is open and no pre-registration is required. Bring your lunch and your questions. For additional information about benefit services or events, see the Website at [www.llnl.gov/llnl/02employment/benefits/seminars.htm](http://www.llnl.gov/llnl/02employment/benefits/seminars.htm).

Wednesday  
1

Space is available for the two-day **Comprehensive Retirement Planning Workshop**, today and Thursday in the Bldg. 123 auditorium. This workshop, offered by the Benefits Office, is designed especially for those within 10 years of retirement. It will provide participants with a complete overview of the benefits from the University of California Retirement Plan. The workshop will also provide a comprehensive look at Social Security and Medicare, long-term care, investment options after retirement, estate planning techniques and "career" alternatives after retirement. To register on-line, go the Website at <http://www.llnl.gov/llnl/02employment/benefits/benefits.htm>. The cost for the workshop is \$95. Employees may register their spouse to accompany them at no additional cost by calling the Benefits Office, 2-9957.

Friday  
3

A representative from **California Casualty Insurance** will be in the Benefits Office today. Appointments are required and may be scheduled by calling 2-9955. California Casualty offers individual rates to Lab employees by payroll deduction for auto and homeowner/renter insurance. As with any employee-paid insurance coverage, employees are encouraged to comparison shop.



The Worklife Programs Office and the Association of Black Laboratory Employees (ABLE) present

**Eddie Faye Gates on**  
**"Diversity: Moving Beyond History"**  
**Thursday, Sept. 9**  
**Noon**  
**Bldg. 543 auditorium**

Eddie Faye Gates is an oral historian and author.

She was born and raised in Oklahoma and moved throughout the United States and Europe with her family.

She attended Tuskegee Institute for three years and is a *Magna Cum Laude* graduate from the University of North Dakota at Grand Forks where she received a bachelor's degree in composite social science. She later graduated with honors from the University of Tulsa with a master's degree in history.

Gates moved back to Tulsa in 1968 where she taught high school for 22 years before becoming the social studies curriculum coordinator for the dis-

trict. She was instrumental in implementing a much-needed multicultural curriculum.

After retiring from teaching, she authored three books: *Miz Lucy's Cook-ies: And Other Links in My Black Family Support System*, an autobiography, *They Came Searching: How Blacks Sought the Promised Land in Tulsa*, and *Riot on Greenwood*.

She is presently an education consultant and activist. Her most recent work is centered on the Tulsa race riot of 1921. In 1998, she was named to the Oklahoma Commission to Study the Tulsa Race Riot and became chair of the Survivors Committee.

*LLESA will offer Gates' books for purchase at the speaking engagement.*

For additional information, contact Michele Cardenas, 3-2796 or [cardenas7@llnl.gov](mailto:cardenas7@llnl.gov).

## IN MEMORIAM

### Patrick O'Connor Duke

Patrick Duke of Acampo died on Aug. 20. He was 71.

Duke was born in St. Johns, Ariz. and moved to Alameda, Calif. in 1947, and then to Livermore in 1956 when he joined the Lawrence Radiation Laboratory. He worked in the Weapons Engineering Division of Mechanical Engineering as a technician and senior technical associate. He retired in 1998 after 41 years of service. In 2000, Duke returned to the Laboratory as a Johnson Control employee and worked in support of the Highly Enriched Uranium Transparency Program in the Energy and Environment Directorate until his death.

He was an avid water-skiing enthusiast, skiing in the Nationals in Baytown, Texas at the age of 69.

He is survived by his wife, Hazel Duke of Acampo; children, Judy and husband, Dan Kuhl of Shingle Springs, Patrick and wife, Susan Duke of Livermore, Peggy Duke of Eureka, Daniel and wife, Barbara Duke of Vacaville, Jeffie Duke-Rosenbaum of Fair Oaks, and Timothy Duke of Acampo; seven grandchildren, Patrick Kuhl, Kelly Kuhl, Ryan Duke, Jerry Duke, Tisha Duke-Rosenbaum, Jena Duke and Shea Duke; brothers, Marty Duke and Albert Duke of St. Johns, Ariz.

There will be a memorial service at Lodi Funeral Home at 2 p.m. today (Aug. 27).

Committal will be private.

In lieu of flowers, memorial contributions may be made to National Institute of Neurological Disorders and Stroke, Financial Management Branch, Building 31, room 8A34, 31 Center Drive, MSC 2540, Bethesda, MD 20892-2540.

## Newsline

*Newsline* is published weekly by the Internal Communications Department, Public Affairs Office, Lawrence Livermore National Laboratory (LLNL), for Laboratory employees and retirees.

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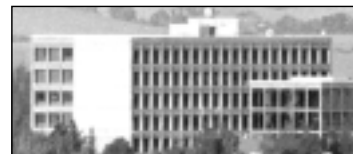
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**Web site:** <http://www.llnl.gov/PAO/>

## AROUND THE LAB



## Applications available for LLLWA fall scholarships

Applications are now available for Women's Association (LLLWA) scholarships for the fall 2004 academic year.

The program provides financial support to LLNL employees in pursuit of their education as a means of career and personal advancement. These scholarships are designed for employees who have completed academic work within the last two semesters and are planning to continue their academic career in the Fall.

The Women's Association has awarded \$64,775 in scholarships to 198 women and men employees since 1984. The Department of Energy has called the scholarship program "one of the most effective efforts DOE-wide to improve the status of women."

The cost of the scholarships is covered by LLLWA dues plus funds contributed by the Laboratory's Work

### Membership drive and fundraiser lunch

The Lawrence Livermore Laboratory Women's Association will hold its annual membership drive and scholarship fundraiser lunch from 11:30 a.m. to 1 p.m. Wednesday, Sept. 8 in the picnic area by the pool.

The event will feature guest speaker Julia Clare of Girls, Inc., an organization that supports and incorporates girls' ideas, perspectives, and voices throughout program implementation, development, and evaluation. This youth-centered approach engages girls as problem-solvers, promotes their development, and increases their opportunity to form supportive relationships.

Menu choices include tri tip or grilled portabella mushroom sandwich and fresh fruit, green salad, cookie, and beverage. The cost is \$20 with proceeds going to the LLLWA scholarship fund. Please make your reservation by Friday, Sept. 3.

Contact Dianne McGovern, 2-9771, (mcgovern1), Christine Bell, 2-6472, (bell2) or Chelle Clements, 2-8134, (chellec).

Life Programs and donations of Lab employees. The awards will be announced in January 2005.

Applicants must complete a simple application form, include transcripts, a letter of recommendation from their LLNL supervisor, teacher or educational advisor, and participate in a short, informal interview with members of the Scholarship Committee.

To receive a scholarship application, contact Pat Chance (chance1@llnl.gov or 2-2807) or Joni Schuld (schuld2@llnl.gov or 2-4168.) The Scholarship Program Website — <http://www-r.llnl.gov/lllwa/scholarship.html> — also gives more details on eligibility and selection criteria and will soon contain a downloadable 2004 application form. The deadline to submit applications is Oct. 18.

## BRIEFLY

### Orientation for new postdocs

The Postdoc Advisory Council is sponsoring a brown-bag orientation series for postdocs hired during the past year. However, all postdocs are welcome to attend.

Beginning Aug. 30, and ending Sept. 13, the two-week orientation will brief new postdoc on the Lab's mission and purpose; the differences and similarities among the various directorates and how to efficiently "get things done." The briefing will be held from 12-1 p.m. in Bldg. 219, room 163. Agenda information can be found on the Postdoc Bulletin Board - Social Calendar. For additional information, contact Beverly Williams, williams92@llnl.gov.

### CalPERS Long-Term Care applications

The 2004 CalPERS Long-Term Care application period ends Tuesday, Aug. 31. Long-term care provides the extended care you would need when, because of a chronic illness, injury, or old age you need help with basic activities like dressing, bathing or eating. Generally long-term care is not covered by health insurance, disability insurance or Medicare. The program is available to all California public employees and retirees, including University of California employees and their family members.

Applicants may choose from a broad array of benefits options in each of the three CalPERS Long-Term Care plans. Premiums are age-related. The younger you are when you apply, the less a plan costs. An informational video and application kits regarding the CalPERS Long-Term Care Program are available in the Benefits Office, Bldg. 571, room 1205. For additional information, you may visit the Benefits Website at [www.llnl.gov/llnl/02employment/benefits/benefits.htm](http://www.llnl.gov/llnl/02employment/benefits/benefits.htm) or call 2-9955.

### Women's Forum calls for posters

The 2004 Laboratory Women's Forum will be hosted by Lawrence Berkeley National Laboratory on Oct. 27. The forum will be attended by about 150 women from LBNL, Lawrence Livermore, Los Alamos and Sandia national laboratories. This year's forum will focus on "New Directions: Women of Influence in the National Laboratories." One session will cover the projected impact of science and technology on women's issues in the future. This will include a discussion on what women's work-life environment could be like, circa 2010. Individuals interested in presenting a poster are encouraged to contact Lori Souza at Souza26@llnl.gov by the end of August.

Poster format information will be available soon. Suggested topics for posters could be, but are not limited to women working advances in: human health issues; artificial intelligence/robotics; information technology (e-collaboration); national security; homeland security; environmental protection; alternative energy sources and wireless communications.

### PNL computing facility seeks white papers

Lab employees are invited to submit white papers to the Molecular Science Computing Facility of the William R. Wiley Environmental Molecular Science Laboratory at the Pacific Northwest National Laboratory. The goal is to collect information regarding the resources needed to accomplish future scientific goals. The papers should focus on science vision for the 2006/07 timeframe and the role MSCF high-end computing resources will play in achieving that vision.

The white papers will facilitate the development of documentation that will be used to justify new investments in high-end computing resources at EMSL. Authors of papers will be invited to attend a workshop at PNNL (to be scheduled in October) to finalize the document for presentation to the Department of Energy Office of Biological and Environmental Research.

All white papers must be received by Sept. 10. Early submission of papers is strongly encouraged. More information, including paper content and format guidelines, is available at <http://mscf.emsl.pnl.gov/greenbook.shtml> or <http://mscf.emsl.pnl.gov/greenbook.shtml>.

### Cancer walk fundraiser

The Tri-Valley chapter of S.O.C.K.s (Stepping Out for Cancer Kures) is holding its annual fund-raising pasta feed, raffle, and auction today (Aug. 27), at the Veteran's Hall in downtown Pleasanton. Their goal is to raise money for the Breast Cancer 3-Day walk that benefits the Susan G. Komen Breast Cancer Foundation. The S.O.C.K.s team includes almost a dozen Lab employees who are training to walk with thousands of other individuals participating in the Breast Cancer 3-Day Walk, Oct. 15-17 in San Francisco. They will walk 60 miles to raise money that benefits the Susan G. Komen Breast Cancer Foundation, which funds breast cancer research, education, screening and treatment programs, as well as the National Philanthropic Trust, to provide a special field of interest fund for breast cancer initiatives.

In America, a new case of breast cancer is diagnosed every three minutes and every 13 minutes, the disease claims another life. Breast cancer is the most common cancer diagnosed in the San Francisco Bay Area. Support your co-workers by buying raffle tickets and attending the pasta feed today. For more information, contact Cheryl Hernandez, 2-1300.

### EYH San Joaquin

The planning committee for the San Joaquin "Expanding your Horizons in Science and Mathematics" conference scheduled for Oct. 2 is looking for volunteers to help stuff envelopes. If you are interested, attend a meeting from 11:30 a.m. to 1 p.m. Tuesday, Aug. 31, at Sandia, Bldg. 905 (CRF) mezzanine. For more information about this and other volunteer opportunities, contact Yuki Ohaski, yohash@sandia.gov or 294-2393. Non-LLNL or Sandia employees who wish to participate on Aug. 31 should contact Yuki Ohashi 24 hours in advance.





## NEWS YOU CAN USE

# Changes are ahead for AIS Web-based applications

The Administrative Information Systems (AIS) department has begun to move more than 50 business applications to the latest Oracle 10g Application Server environment. This technology upgrade will enhance current applications, making them faster as well as more secure and powerful.

More information can be found in two places:

- The Special Announcement section of the MyLLNL Front Page (<https://www-r.llnl.gov>)
- The AIS homepage (<http://www-r.llnl.gov/ais/>) Once there, you can click AIS 10gAS Application Migration Information and find a list of applications that are being moved, the schedule, key application contact information and a list of frequently asked questions.

LITE is the first application to move to this new environment. During login, you will notice two

The sign-on screen for LITE will look different as Lab business applications are upgraded.

changes; the sign-on screen will look different and the PAC (Personal Access Code) you enter (as with other institutional applications) will now be case sensitive. Remember that your PAC has at least one upper case letter. LITE users will experience no changes to LITE once they are logged in. Subsequent applications moving to the new environment will experience identical login changes.

The goal of AIS is to keep application users up to date with the expected application movement dates, points of contact, and most importantly, to keep the overall process as seamless as possible.

As each application is moved, users will be notified of the upcoming changes. For additional information, contact Howard Guyer at 2-8184 or at [10gAS-AMPTeam@llnl.gov](mailto:10gAS-AMPTeam@llnl.gov).

# Planning future directions for ESnet collaboration services

The Department of Energy's (DOE) Energy Sciences Network (ESnet) will hold a workshop from Oct. 27-29 to help plan the future directions for ESnet Collaboration Services. The workshop will be held at Lawrence Berkeley National Laboratory.

ESnet Collaborative Services provides a number of online services aimed at improving collaboration among researchers at the many national laboratories, including the Laboratory, and universities served by ESnet. Users, engineers and managers of collaboration services at all DOE/ESnet research centers are invited to attend.

"A key purpose of the workshop will be to gather current and anticipated requirements of

our user community," said workshop organizer Clint Wadsworth. "The workshop will investigate emerging and future technologies that promise to change the way scientists communicate and work. We also want to provide a forum for users to discuss the role of the ESnet Collaboration Services in their research."

The workshop agenda will consist of noted guest speakers in the fields of voice, video, and data services, as well as, present the current features of ESnet Collaboration Services.

The keynote speaker will be Jill Gemmill, assistant director of the Academic Computing Office of the Vice President for Information Technology at the University of Alabama at

Birmingham. Gemmill, who is also a research assistant professor in the Department of Computer and Information Sciences, directs the IT Academic Computing Advanced Technology Laboratory. Her current research activities include use of single-sign-on authentication architectures, transparent authorization, secure videoconferencing, end-to-end application performance, grid computing and developing better collaboration tools for virtual organizations.

For more information on the agenda, speakers, and registration for the workshop, go to: [http://www-staff.es.net/~mikep/workshop/esnet\\_collaboration\\_workshop.htm](http://www-staff.es.net/~mikep/workshop/esnet_collaboration_workshop.htm).

## Technical Meeting Calendar

Friday  
**27**

### INSTITUTE FOR SCIENTIFIC COMPUTING RESEARCH

"Efficient Implementation and Parallelization of Meshfree and Particle Methods — The

Parallel Multilevel Partition of Unity Method," by Alex Schweitzer, Universitat Bonn. 9 a.m., Bldg. 451, room 1025 (property protection area). Contact: Rob Falgout (CASC), 2-4377, or Leslie Bills, 3-8927.

Monday  
**30**

### BIOLOGY & BIOTECHNOLOGY RESEARCH PROGRAM

"Gene Regulatory Elements Discovered by Vertebrate Genome Comparisons," by

Ross Hardison, Pennsylvania State University. 10:30 a.m., Bldg. 361 auditorium. Contact: Lisa Stubbs, 2-8473, or Sandy Jackson, 2-9308.

Sept.  
**9**

### PHYSICS & ADVANCED TECHNOLOGIES

"Inflation and Precision Measurement of Primordial Density Fluctuations," by Hugh Manini.

10:30 a.m., Trailer 2128, room 1000, badge required. Contact: Annette Cook, 2-7856.

Sept.  
**10**

### INSTITUTE FOR GEOPHYSICS & PLANETARY PHYSICS

"The Spitzer Infrared Array Camera (IRAC) Shallow Survey," by Peter Eisenhardt, Caltech. Noon,

Bldg. 319, room 205. All attendees need to be badged. Contact: Wil van Breugel, 2-7195, or Sharon Taberna, 3-6290.

Sept.  
**13**

### BIOSECURITY & NANOSCIENCES LABORATORY

"A Nanoengineering Approach to Investigate Polyvalent Biochemi-

cal Interactions," by Gang-yu Liu, Department of Chemistry, UC Davis. 2 p.m., Bldg. 151, room 1209 (Stevenson Room). Contact: Katie Thomas, 2-7903.

Sept.  
**20**

### BIOSECURITY & NANOSCIENCES LABORATORY

"Conductance Imaging AFM and the Electronic Properties of Carbon Nanotubes," by

Michael Stadermann, University of North Carolina at Chapel Hill. 2 p.m., Bldg. 151, room 1209 (Stevenson Room). Contact: Katie Thomas, 2-7903.

The deadline for the next Technical Meeting Calendar is noon, Wednesday.

Send your input to [tmc-submit@llnl.gov](mailto:tmc-submit@llnl.gov).

## NEWS OF NOTE



# Saito honored for non-proliferation policy work

By Leslie Schwartz

NEWSLINE STAFF WRITER

Theodore Saito has received the Exceptional Public Service Award from the Department of Defense for his work in non-proliferation policy at the Pentagon from Sept 2002 to June 2004.

Saito, a senior staff engineer who has worked at the Lab for 20 years, was sent to work in Washington D.C. for the Department of Energy in September 2001 as the scientific adviser for the National Ignition Facility. A year later, he was transferred to the Pentagon in a DoD sponsored inter-governmental personnel act (IPA) position working with the offices of Non-Proliferation Policy and Short-Arms Control Policy.

There, he worked on various treaties to prevent the spread of nuclear weapons internationally, as special assistant to the director for Nonproliferation Policy Office of the Assistant Secretary of Defense for International Security Poli-



JACQUELINE MCBRIDE/NEWSLINE

Flanked by Larry Ferderber (left) and Jeff Williams, Ted Saito displays the Exceptional Public Service Award he received from the DoD.

cy, and Office of the Under Secretary of Defense for Policy.

Saito served as the lead officer on the Comprehensive Nuclear Test Ban Treaty, and helped draft

the deputy assistant secretary of defense's Senate testimony about adding protocol language to the treaty. He also collaborated with the International Atomic Energy Agency (IAEA) and was instrumental in the federal government's efforts to monitor nuclear weapons in foreign nations such as India, Pakistan, Iran and South Korea.

Saito feels that this position provided "excellent insights of the constraints and requirements of nuclear weapons and proliferation treaties and the monitoring of activities related to nuclear weapons."

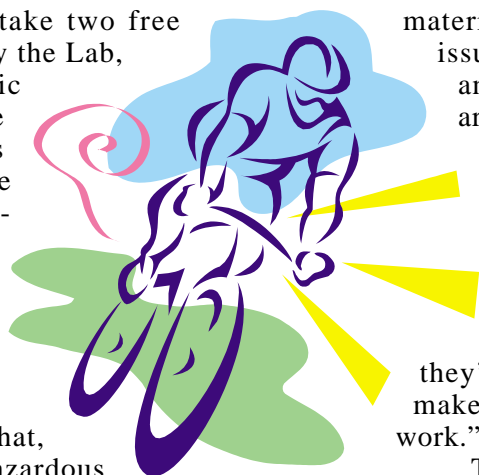
He received a medal and certificate in recognition of his outstanding contributions during his two-year appointment. His experience in Washington has improved his understanding of the internal workings of the Lab, especially in the Nonproliferation, Arms Control, and International Security Directorate (NAI).

"My assignment gave me really good insights into what is going on outside the Lab that relates to our mission," Saito said. He currently continues to expand his record of public service, working in Engineering Associate Director Steve Patterson's office, coordinating recruiting efforts and diversity issues around the Lab.

## Lab employees urged to stay the course for Traffic Safety Month

August is a good time to take two free traffic safety courses offered by the Lab, according to the LLNL Traffic Safety Committee. It says the courses will benefit all of us who walk, drive or bike at the Lab. The committee has designated August as Traffic Safety Month at the Lab to remind employees of their personal role in traffic safety, and is promoting the courses as part of this activity.

The committee points out that, despite on-site dealings with hazardous



materials or other unique site issues, riding bikes, walking and driving motor vehicles are among the most dangerous things we do. Committee Chair Dennis Barrett said, "We offer free Bicycle Safety and Defensive Driving courses. Employees who complete both can truly say they've done something to make the Lab a safer place to work."

The Bicycle Safety course

(HS5420-W) is Web-based and takes about 20 minutes to complete. It covers lessons learned regarding bike accidents, how to do a quick safety check on a Lab bike and more. The course can be found at ([www.hctrain.llnl.gov/SET/HS5420/BSO1.html](http://www.hctrain.llnl.gov/SET/HS5420/BSO1.html)).

Defensive Driving (HS-5600-CBT) is a computer-based course that is taken at the Hazards Control Training Center. It takes about one hour to complete and covers: what is defensive driving; defensive driving techniques; how to avoid collisions; highway and urban driving; and defensive driving attitudes. Contact Debbie Fernandez, 3-1094, to schedule an appointment.

## AWARDS

Continued from page 1

tion," last year and this year.

Award-winners honored at the BBRP ceremony were:

- The developers of BASIS, the Biological Aerosol Sentry and Information System, the nation's first integrated biodefense system and the precursor of the Department of Homeland Security's Biowatch Program: Landa Danganan, Patsy Gilbert, Kris Montgomery, Evan Skowronski and Cheryl Strout of BBRP; Bruce Henderer, Robert Johnson, Richard Parker and Paul Sargis of Engineering; Dennis Imbro and Paula Imbro of Nonproliferation, Arms Control and International Security; Tom Slezak and Mark Wagner of Computation; and Julie Avila of Hazards Control.

- The team responsible for discovering a new technique for silencing genes using si-Hybrids — nucleotides composed of complementary strands of DNA and RNA: Allen Christian, Larry Dugan and Erik Hofmann of BBRP.

- The developers of the Autonomous Pathogen Detection System, or APDS, which is able to

rapidly detect the airborne release of biological threat agents and can monitor the air for bacteria, viruses and toxins: Richard Langlois, Anne Erler and Shanavaz Nasarabadi of BBRP; Steve Brown, John Dzenitis, Bruce Henderer, Robert Johnson, Leslie Jones, Ray Mariella, Donald Masquelier and Thomas Metz of Engineering; Bill Colston, Benjamin Hindson, Anthony Makarewicz, Mary McBride, Ujwal Sathyam and Kodumudi Venkateswaran of Physics and Advanced Technologies; Dora Gutierrez and Sally Smith of Johnson Controls; Ramakrishna Madabhushi of Chemistry and Materials Science; and Fred Milanovich of NAI.

Susan Lucas, manager of production sequencing at the DOE Joint Genome Institute (JGI), received a special recognition achievement award as senior author on an article in the journal *Nature* describing the sequence and annotation of human chromosome 19. Branscomb also praised Lucas for her technical and management skills and her "personal contribution to the success of the Department of Energy's contribution to the Human Genome Project," which Branscomb helped spearhead as JGI's first director. "My and DOE's indebtedness to her is beyond measure," Branscomb said.

Several other BBRP employees with bachelor's

or master's degrees were recognized as first authors or co-authors of scientific papers, an achievement not normally expected of researchers at that level: Susan Fortson, Francesca Hill, Mike Malfatti, Karen Sorensen, Shelley Corzett and Rebekah Wu. Mona Hwang was acknowledged for analyzing 4,000 biological samples in less than four weeks for the Department of Defense; and Dominique Toppani was recognized for writing an automated crystal detection program that has been licensed to a commercial pharmaceutical company and for presenting a paper on the program to the American Crystallographic Association.

Sarah Wenning, acting deputy associate director for operations at BBRP, presented administrative and operations awards to Felice Lightstone, Peter Agron, Michael Thelen, Langlois, Sandra Chaparro, Vicki Kopf, Andrea Jenkins, Kris Montgomery, John Hinz, Daniel Barsky, Colleen Elso, Jan Miller, Nancy Wrigley, Tami Dominick, Denise Yadon, Carolyn Burkhart-Schultz, Vicki Burau, Ann-Marie Dake, Mark Knize, Marilyn Ramsey, Robin Abacherli, Sara Richardson, Mike Malfatti, Stephanie Malfatti, Jim Felton, Jimmy Mow, Maurice Pitesky and David Ferguson.





# CLASSIFIED ADS

See complete classified ad listings at  
<https://www-ais.llnl.gov/newsline/ads/>

AUTOMOBILES

1983 Toyota Celica GT \$950, runs strong, 5-speed manual, liftback, sunroof, AC, AM/FM cassette. 296-5643.

2002 - Saturn SC 1 3 door coupe, dark blue, excellent condition, 44K miles, automatic, CD player, alarm, new tires, \$12,000 925-455-4576

1994 - Mitsubishi Eclipse - Nice shape silver/green. 16VOHC. 113k miles. Power windows, locks, ac, cc. Reduced to \$3,200 to sell. 925-245-1114

2003 - PT Cruiser, Touring edition, blue, about 29K miles, great little car! asking 13K OBO. 209-239-2639

2002 - Dodge Ram 1500 SLT Quad Cab. Power locks, windows, and drivers seat. CD, rear slider, tow package. Much more, 25k miles! \$18,900 916-786-2326

1989 - Olds Cutlass Supreme 2dr white, 84k mi, one owner, Digital/Deluxe leather interior, Al wheels, 9/10 overall, \$1850 925-447-0515

1969 - Ford Mustang, 351W-4V, PS, AC, Disc brakes, new trans, flows and paint. Beautiful. \$7500/OBO 530-902-7558

2000 - Toyota Camry CE 4D Sedan,silver,perfect condition,4cyl.,2.2L,loaded,70K miles,Auto-trans,alloy rims,CD,tinted windows,\$8,900 925-736-7507

1986 - Free, Dodge Caravan, good car, bad engine. 925-373-9622

2001 - Jeep Wrangler Sport 39K 4.0LV6, Automatic, power steering, CD player, running boards, new tires 14,800 OBO (blue book 15K+) 925-963-2186

1998 - BMW Z3 Roadster Conv. 1.9L, 5-Spd, Sky Blue, Blk top, leather, immaculate, 24k miles, 25-28 MPG, GREAT Fun car, \$14,500 obo 925-455-5209

1989 - ACURA LEGEND-\$2,750obo. Looks/Runs Excellent. Loaded with Power Options, 5-speed, 186hwy mi, new timing belt, valve job and brakes. 209-481-4032

1997 - Infinity Q45T, V8 Luxury,leather,Sun Roof, heated seats,6 disc changer,perfect.\$54K new in 97, Dealer service records. 118k miles, \$10,300. 209-823-3590

1968 - 1968 Buick Riviera GS/430 eng. Runs very good and needs light body and electrical work. Very fun car to drive. \$3,000. 209-833-6483

1997 - BMW 328i - 2 door, 5 spd, 55K miles,Maroon w/tan leather, excellent car, garaged, original meticulous owner, \$12,300. 925-447-2450

1999 - Corvette, blk on blk, 6sp, 53k miles, new tires, loaded, xcellent cond, removable glass top, 27,500.00. 209-847-9574

1999 - Ford Explorer, Eddie Bauer, lots of extras! 50,000 miles, \$18,000 firm. 925-989-8059

AUTOMOBILE ACCESSORIES

15 inch BMW original equipment spoke rims. All four in excellent condition fits 5 series. \$250.00 OBO. 209-830-6703

BICYCLES

Mountain bike, 17.5in, in great shape. Tuned up in Spring with new tires, brakes, cables. Comes with seat pouch and bike lock. Asking \$140. 925-784-3731

Royce Union Mountain Bike. 2 years old. \$75 209-483-8719

Men's mountain bike. ca. 6 working gears. Rides like the wind. I just gave it a new front tire. \$70.00 617-669-3701

BOATS

1998 Malibu Sunsetter LX, 320 hp, tower, wedge, CD, 350 hrs., great condition, \$25K 925-426-1255

Ski Centurion, 1986 Concours Skier. 21 Ft, Ford 351 240 Hp,1550 hours. playpen bow. Barefoot boom, Skylon. \$6500 925-443-7704

97 LARSON 20ft bow rider exel cond, 1 owner, low hrs, \$14.5K 925-899-5068

96 Regal 20 FT. Deck Boat. 5.0 V-8 FI, Volvo penta dual prop,less than 130 hrs. To much to list. Call please. 925-754-5377

1980 14 foot Sunfish sailboat \$150 925-684-9371

35 HP electric start outboard Evinrude. Includes gas can. \$300 OBO 925-516-2570 925-516-2570

CAMERAS

Rollei TLR Model DBP DBGM W/Schneider Xenotar 80/2.8 lens and filters. Rollei Leather case extras. \$550/offer 925-443-9599

ELECTRONIC EQUIPMENT

Pocket PC PDA with 128MB SD card. Get organized , play games, and listen to MP3s. Lots of accessories. Great condition. Asking \$95 925-784-3731

Linksys 5-port network hub. Model LH100H5. \$20. 925-462-6607

Mac G4, 592 MB RAM, 2 hard drives. 17-in monitor. 2 scanners, 2 printers, extras. \$200 for all or make offer for parts. 925-837-0421

Blackberry PDA phone. Model 7210. Color display. Wide variety of features. \$150.00 925-838-9302

Panasonic 19inch color TV with remote. Works great. \$40 or offer. 925-200-9976

15 inch Computer Monitor. Have two 15 inch computer monitors, one with speakers. \$25 obo. 209-835-6556

Arcadia electronic skeet game, like new, in box, \$20, can bring to lab 925-245-9648

GIVEAWAY

Gravel. Great for landscaping/ drainage projects. You haul. 925-485-4321

220V handmade table saw in working condition; Small painted desk. You haul away. In Livermore. Call before 9:00pm. 925-449-2650

Patio set, metal. Bar height, green, 4 chairs, table, umbrella, base, good cond. 925-443-2856

Bunnies Lopeared mix, 10 weeks old 925-443-5549

HOUSEHOLD

Chest freezer, white Kenmore - (28D x 48W x 36H - inches) about 16 cubic feet. About 15 years old, runs fine, we need space, \$200 or make offer 925-838-4150

King cherry headboard \$100, Lane Mahogany sofa table \$150, Lt. green wingback chair/ottoman \$75, misc. lamps. 925-513-1108

Sofa/Loveseat set, offwhite w/ removable cushions, \$75 obo. Different white sofa w/ cover \$30 obo. 209-380-1953

Loveseat, Wing Chair, Ottoman. Hunter green w/ floral print & wood bun feet. Great condition. Also perfect for college dorm/apartment. \$100. 209-836-3365

Refrigerator, 23.5 cu in GE side-by-side, biscuit color. Ice & water thru door. 66.6 H x 35.8 W x 31.5 D. \$200. 925-837-0421

Oak twin bookcase headboard w/mattress and frame. \$50. Solid oak roll top desk w/locking top, not a scratch. paid \$1200 sell for \$500 925-516-8339

Kenmore washer & dryer, heavy duty, large capacity, washer has very small leak, otherwise both in excellent condition. \$125/both 925-243-1364

Solid oak round pedestal table, expansion leaf, six matching chairs \$350; metal trundle bed frame \$50. Call before 9:00pm 925-449-2650

GE matching Dryer & Washer. Used only 8 mos. Moving. Currently in storage. \$450 925-960-1812

Lawn Mower, Briggs engine, starts easy, no bag, excellent shape. \$40. Also have nice electric mower \$40. 925-449-7978

Dining Table - Glass w/4 Upholstered Chairs \$250 925-449-1481

WASHER/DRYER, Whirlpool(Ultimate Care II) commercial quality, like new (approx 1 yr old), BO 9 925-634-5851

GE 20 cubic ft refrigerator. 8 years old. Runs great. White, with freezer on top. \$150.00 209-836-4996

SAFE. Dimensions are 22in Wide X 39in Deep X 51in High. Weight is 1040lbs. \$250.00 510-651-2425

Sleep like a baby again! Bed, spring box, comfy, high quality mattress, will throw in a pillow. \$150.00 obo 617-669-3701

Full mattress set and frame, vy good condition, \$25 925-443-3549

Techline office: desk, workstation, printer stand,3-dwr file unit, adj. keybd tray, shelves, cabi-net.\$450/B.O. 925-449-7661

CD/DVD/VHS STORAGE CABINET - solid oak doors, black finish interior. 44.5 inches wide, 33.5 inches high, 17.5 inches deep. Recently purchased. \$175. 925-449-8341

White tubular metal sofabed frame. You add the futon. \$65

OBO 925-516-2570

SILK Lampshades, I purchased in Korea about 8 yrs ago. 2 brand new for \$45 each, also have 2 more that we used, in excellent condition for \$25 each. 209-833-5033

MISCELLANEOUS

Garage Sale August 28 8 a.m. - 3 p.m. 809 Polaris Way, Livermore. Fishing gear, children small bikes, tools, fender for F150, lots more. 925-447-8551

1300-psi pressure washer. \$40. 925-454-8827

Metal 4 shelf unit \$5. Shop shelf w/ flourescent light and 4 outlets, measures 32in by 9in, \$10. Milk crates, 4 available at \$2 each. 925-245-9648

05 Entertainment Book Fundraiser for Livermore American Indian Center ONLY \$20.00 925-890-8857

Prenatal Heart Listener. Record your babys heartbeat. Used once, Like new in the box. \$20.00 209-892-2369

Garage Sale, Sat Aug 28, 8:00 to 2:00, Books, Yarn, Sm Appliances, Clothes, Furniture. 364 Yosemite Dr, Livermore. 925-447-3307

49er Tickets, qty 4, upper-reserved, section 60, all games available, \$64 each, face value 510-326-5611

SF 49ers vs. Atlanta 9/12/04 Home Opener 2 tix @ \$64 ea. (face value) 209-599-9942

OAK A's Tickets for Fri. 9/10 7:05PM or Sat. 9/11 1:05PM vs Cleveland MVP 3rd baseline Sec 125/Row 13/Seats 1&2 \$28/ticket 925-449-5481

Two 49er Tickets. SD Chargers on Sept2. Upper Reserved Section25, Row9, Seats11-12. Great view of game/replay screen. \$128 for both. 925-455-4702

Conference table 42 inches wide by 6 foot long, heavy, very nice, wonderful condition. u-pickup 209-835-6662

Super Low Prices on trees & Shrubs while we build new nursery. Open Sat/Sun 8:00 to 4:00. 1555 Eden Plains Rd, Brentwood 925-240-6311

MOTORCYCLES

2003 - King Cobra 50cc liquid cooled race bike. Very trick and fast hand made in the USA. Perfect cond. \$2500 obo. 925-634-5968

1985 - Yamaha PW80, Runs great, great starter bike. No need for it yet, possibly trade for a PW or Xr 50. \$600 b.o. 209-823-3590

MUSIC INSTRUMENTS

Roland MP300 digital piano. 3 yrs old. Excellent cond. \$1600 obo. 925-443-1535

Upright piano for sell. Moving, must sell. Will accept reasonable offer. Great for beginner, needs tuning. 35 y/o Balwin. 925-449-4421

Baby Grand Piano Storey & Clark \$1500 925-449-4624

100 Watt Carvin tube amp 2x12

w/pedal for DIST & clean. Good condition - \$300. 925-606-6422

Takamine Classical Guitar Model C132S. with hard case. Solid Top and Excellent Tone. Retail for \$899.50. Sell for \$495.00 209-484-0058

Grand piano, 1984 Young Chang G-185 (6 ft., 1 in.) with matching bench and a free tuning by my tuner. Polished walnut. Excellent condition. \$6,000. 925-447-4352

Drum pedal. Tama, Iron cobra,powerglide, double pedal. Great condition! \$185.00 925-373-6255

PETS & SUPPLIES

Pembroke Welsh Corgi puppies. 1 male (\$500.00)and 1 female (\$550.00). Can be taken home on October 8th. 209-836-9035

Rescued long haired male black kitten 15 weeks old. Wonderful with dogs and other cats. Great disposition.. Neutered/dewormed/shots. \$70 adoption fee 925-980-1564

Adorable rescued kitten- tiger striped white belly and paws.. Emma is 17 weeks. Spayed, dewormed & all shots complete. \$65 adoption donation 209-833-0607

Kittens Looking For A Good Home 13 weeks old-fixed with all shots very sweet \$75.00 donation to the Farrell Cat Cause 510-881-2071

RECREATION EQUIPMENT

Cross country skis, youth size, with poles. \$15. 925-245-9648

Race Kart - Built for kids. Extremely good condition. Driven twice by my scared daughter since completely rebuilt. \$750 OBO 209-838-0304

Womens right hand, graphite Mitsushiba golf set. Bag, 3 woods, 7 irons, putter and hand cart. Like new, \$200 925-373-9717

Weider X2000 Crossbow workout system. Just like the Bowflex system. Almost brand new. Will email photos. Paid 500.00. Sell for 250.00 209-836-4996

RIDESHARING

Express your commute, call 2-RIDE for more information or visit <http://www-r.llnl.gov/tsmp>.

Modesto - Vanpool has opening.Meets at Carpenter and Blue Gum (Home Depot). Leaves at 6:35 am and leaves Lab at 4:45. Receive tax credit/ wonderful people. 209-576-0217, ext. 2-7459

Modesto Dennys on Salida Blvd at Pelandale and Hwy 99 - Daves Luxury vanpool, captain seats, reading lights cellphone 8-4:45 ridership-based fares, 209-576-7764, ext. 3-3194

Cupertino Area - Looking to join a carpool as a rider/driver. AWS M-Th 7:15am-5:00pm, Fri 7:15am-4:00pm. 408-438-1784, ext. 4-4527

LIVERMORE - Seeking a ride from So. Livermore Ave. infront of new Livermore Library, to Lab. Will pay accordingly for your service. 925-449-1718, ext. 2-7448

San Jose /West - Looking to join a

SENSOR

Continued from page 1

went on to win an R&D100 award that same year.

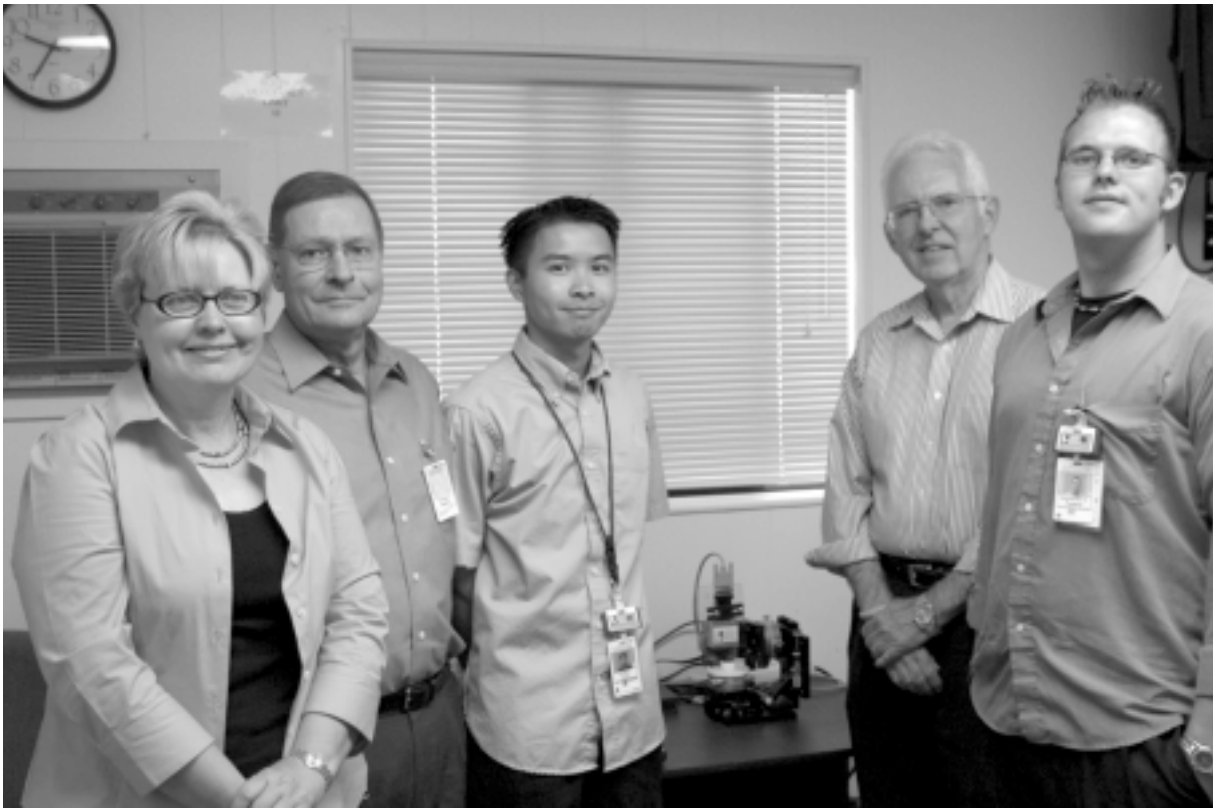
When the sensor was first created nearly a decade ago, the market was not developed enough to create high demand for this innovative technology. However, “robots now have the brainpower and mechanics for this market to be profitable,” said Norma Dunipace, partnership development manager for IPAC.

After an engineering prototype was developed, Dunipace and her group collaborated with Theodore Hagelin, director of New York State Science and Technology Law Center, and his team of graduate students at Syracuse University.

“It happened by complete serendipity,” Hagelin recalled, describing how he sat next to Dunipace at a Licensing Executive Society conference last year and before they both knew it, had decided to work together to market the sensor.

Hagelin and 12 graduate students in fields ranging from business to law to science and engineering collaboratively put in more than 2,000 hours to develop a feasible corporate marketing report for the SixDOF Sensor. Students “studied the set of law, business and engineering decisions that are made after an invention to turn it into a successful product and service,” Hagelin said, as he detailed the process the students went through.

Dunipace’s associate, Bill Grant, IPAC’s business development executive, also worked hard to help determine the sensor’s value to society and business in order to transfer the technology to industry. “I persuaded companies that the sensor would serve a need to



LESLIE SCHWARTZ/NEWSLINE

**A partnership between Industrial Partnerships and Commercialization Office (IPAC) and Syracuse University helped develop a commercialization report for the Lab’s Six Degrees of Freedom Sensor. Contributors: Norma Dunipace, IPAC; Theodore Hagelin, Syracuse University; Andy Chan, IPAC intern; Bill Grant, IPAC; and Alex Padanyi, IPAC intern, helped in this technology transfer effort.**

enhance their product line in an economically feasible manner,” Grant said.

Alex Padanyi, one of the research assistants from Syracuse who worked on the commercialization report, now works as a summer scholar in IPAC, helping design a more thorough marketing strategy to obtain commercial licenses for the sensor.

“I find working on commercializing new products exciting,” he said. “This has been a great experience that has allowed me to exercise my social skills as well as learn about the industry first hand by going beyond the school experience.”

Andy Chan, Padanyi’s commercialization partner at IPAC and a Santa Clara law student, feels “fortunate to work on a project like this through the whole process and follow through to the end. We have made a lot of progress in a short amount of time.”

The hours these interns have contributed to the project have resulted in sending out product informa-

commercialization.

“There is a need to figure out how to turn those inventions into new projects and services,” Hagelin said. The partnership between LLNL and Syracuse has been “very exciting” and provides a “unique learning opportunity for students. I hope we can build on this experience and remain in close collaboration with LLNL in the future.”

“We are responsible for contributing to the mission of the Lab by advancing technology so it can enter into the private sector,” Padanyi said.

A Federal Business Opportunity (FBO) was released to vendors July 19 and the IPAC team continues to work on identifying possible partnerships with companies interested in license agreements. For additional information about the SixDOF Sensor, visit <http://www.llnl.gov/IPandC/technology/profile/6dof/index.php>.

carpool as a rider/driver. 9/80, off Friday. Non-Smoking. 408-268-7924, ext. 2-9107

Stockton - Fourth driver/passenger needed for carpool from Stockton to the lab. Alternate 9-80 work schedule 7:00 to 4:45. 209-957-4765, ext. 3-5468

Orinda - Lamorinda carpool seeks 4th rider/driver. Lab hours 8am-4:45pm. Meets near St. Stephens and Hghwy 24. 925-253-0498, ext. 2-9823

SERVICES

CONCRETE-foundations, custom, stamped, colored, sealing & more. Over 20 years experience. Free estimates 408-806-9816

Flute/Piccolo Lessons - Livermore. UC degree-minor in Flute Performance, community symphony/band experience. All levels, flute ensembles. 925-455-4046

SCRAPBOOK CLASS - A Year of Memories Album Sept 18; 10am - 1 pm in Brentwood. Call for information. 925-625-4291

Painting interior,exterior,quality paint, quality work. neat and clean. free est. 925-447-0589

SHARED HOUSING

Mountain House - Brand new studio-like apartment, Separate entry and postal address, 15 miles from Lab, Available Oct1, \$600.00/month+Util 925-373-3304

Livermore - Single parent w/2 daughters has room avail. for rent. Lg mstr/bdrm w/bath & full priv. Warm, friendly environment. \$600 mo incl util. Female pref. 925-606-0260

Livermore - 2 furnished rooms, \$400 and \$450. No smoking, no pets. One mature adult per room. 925-447-6218

TRUCKS & TRAILERS

2001 - TAYOTA TACOMA,4DR,4WD,v6, auto trans,pw,pl,alarm,hitch,tail gate extender,cd,rear slider,39000mi, very clean,\$19000. 209-505-5041 209-883-1847

2003 - salem 26ft. front bedroom, bunk beds, ac, 6ft slide out. with hitch. \$14,500.00 209-522-9630

1986 - Terry Manor 29ft travel trailer. Recent roof seal, toilet, propane tanks, battery, carpet. No refrig.

\$2,900 or offer. 925-200-9976

2001 - Aljo 24 ft. fully self contained travel trailer for sale. Many extras, like new. \$11,000 OBO. 209-599-1026

1997 - 1997 Gmc Pick-Up Truck Ext.Cab, 3 Door, Short Bed. Color: Muroon Inside/Out 89k Miles. Great Condition. 11,000 Obo. 925-625-8272

1996 - Dodge Laramie SLT 1500 P/U. Black with matching fiberglass camper shell. Low miles. Excellent condition. \$10,000 OBO. Call after 6 P.M. 209-830-0112

1996 - Ford F150 extended cab 4X4 Eddie Bauer, good condition, 160,000 miles. Power windows/lock CD player bed liner tow and electric break \$6,000. 209-765-6793

1997 - CHEVROLET 1/2 ton ext. cab,silverado at,ps,pb,tilt pw,cruise, am/fm cassette/cd, ex. cond, snug top, tow pkg, \$9,000.obo. 209-823-0508

1982 - Toyota long bed pickup with shell \$2200 or BO. Original owner. 925-846-3548

1970 - Chevy longbed 2wd,full air ride,new paint with flames,new interior,feul cell,headers and flow-masters.New tires and

wheels.\$10,500 OBO 209-321-3143

VACATION RENTALS

Mountain cabin near Arnold. 4 bedr, 2 bath, near creeks, hiking, lakes. Fully equipped kitchen, wood burning stove. Plan for winter 925-245-1114

Soooo cute beach cottage in Santa Cruz. 2 bedr, 2 bath, spa, fully equipped kitchen. Near harbor. Sleeps 7-8 925-245-1114

Kihei, Maui - - One bedroom, two bath condo with large lanai and a beautiful garden view. 925-461-3698

Truckee - Tahoe Donner. Three bedrooms, 2 1/2 baths. Phone: 925-362-0133

Tahoe cabin for rent. Two blocks from Heavenly. Sleeps approx. 8. Call for details. 925-240-1615

SOUTH LAKE TAHOE - 3 Bedroom 2 Bath Chalet, comfortably furnished, all amenities,Escape to Tahoe!! RESERVE NOW! 209-599-4644

Maui, HI - Kahana Reef oceanfront 1BR/1BA condominium. Beautiful two-island view, oceanside pool, and BBQs. LLNL rates for year-round

reservations. 925-449-0761

South Lake Tahoe - Ridge Tahoe: 5-Stars Resort...2BR/2BA condo, indoor/outdoor pools, tennis, spa, kid club, game-room, racquetball courts, 4nights: 9/7 to 9/10 - \$550. 510-582-9028

WANTED

Be a Volunteer Naturalist on the last undammed river on Sierra West Slope, Cosumnes River Preserve. Training in evenings. For info. 209-234-3906

SF vs Miami tickets (2) for 11/28 on Miami sideline with good seat viewing. Willing to pay face value or slightly more. 209-814-3556

Looking for native speaker for Spanish language lessons. Emphasis on conversation and vocabulary building. 2 people at intermediate level. 925-443-2243

Experinced bass player wanted for blues/rock/r&b band w/ horn section. Vocal ability is a plus, but not necessary. 925-634-3357

Practice Partner who likes the Argentine Tango and lives in the East Bay. I attend great AT classes in SF on Saturday mornings. 925-736-1505



SEQUENCING  
*Continued from page 1*

genetic diversity among animals — ranging from humans to worms — is enormous,” said Eddy Rubin, JGI director. “But the reality is it pales in comparison to the diversity between the microbes that make up the bulk of the biomass on the planet. With these new selections JGI will help advance knowledge across such vital topics as alternative energy production and bioremediation, and address important questions of evolution and development.”

The CSP will allocate roughly 15 gigabases (billions of letters of genetic code) of sequencing — about 50 percent of JGI’s annual capacity — for the 23 projects selected from nearly 60 submitted earlier this year.

Adding to the JGI’s leadership in plant genomics will be the characterization of the moss *Physcomitrella patens* that, along with the *Gemmiferous Spike Moss* *Selaginella moellendorffii*, will be the first non-flowering vascular plants to be sequenced. Predating flowering plants by some 200 million



IMAGE BY AJNA S. RIVERA OF THE WEISBLAT LAB AT UC BERKELEY.

One adult and one juvenile of the leech *Helobdella robusta*, one of the species to be sequenced through the JGI’s Community Sequencing Program. The pair of black dots are eyespots or photosensors.

years, mosses were among the first plants to colonize the land, 450 million years ago.

“Human comparative genomics has benefited from having a series of genome projects — mouse, puffer fish, fruit fly, worm,” said Brent D. Mishler, director, University & Jep-

son Herbaria, and Professor of Integrative Biology, UC Berkeley. “*Physcomitrella* will be a triumph for international plant science.”

Evolutionary genomics researchers have their sights set on the first representatives to be sequenced from the large animal group *Lophotrochozoa*. These include the leech *Helobdella*, long used as a model system by biologists studying embryological development and functions of the nervous system, and the polychaete worm, *Capitella*, and the mollusk *Lottia*.

Other CSP projects in the pipeline include:

Groundwater samples from the Oak Ridge National Laboratory Y12 Security Complex — site of one of the highest concentration plumes of mobile uranium with volatile organics, aluminum, nickel, nitrate technetium, thorium

and zinc.

*Karenia brevis*, a single-celled alga responsible for the natural saltwater phenomenon known as “red tide,” which can pose a human health risk and detrimentally affect regional marine economies.

WNV  
*Continued from page 1*

never develop any symptoms, 20 percent may develop mild symptoms similar to the common flu, while only 1 percent result in severe disease.

Plant Engineering has taken mosquito control precautions around the Lab by removing sources of standing water where feasible and invited Alameda County Health officials to tour the site in an effort to identify any remaining potential mosquito breeding areas. The Alameda County mosquito abatement program has set traps onsite

in order to monitor the local mosquito population and to date no mosquito has been found to carry the WNV.

Abatement measures taken include adding mosquito-eating fish to any remaining pools of standing water, such as the Central Drainage Basin.

Eastern Alameda County, including Livermore, has more need for mosquito control than the rest of the county due to agricultural and other standing water sources. “Therefore, employees should pay particular attention to eliminating standing water around their homes,” Seward said.

Employees are asked to report dead birds or any dead animals on site to LLNL Land-

scape and Pest Management at 3-0495.

For more information about West Nile Virus and protective measures, see the page 1 article in the Friday, Aug. 13 edition of *Newsline*. The Health Services Department has posted information about WNV on its Website: <http://www-r.llnl.gov/healthserv/News/westnile.html>. After reviewing the article posted on this Website, if you have any further questions, contact Keith Sheirich, 3-6653, or Richard Watts, 4-4513.

The Alameda County Public Health Department provides updates on West Nile Virus and mosquito abatement at: <http://www.mosquitoes.org/wnvupdate.htm>

Facade lift



JACQUELINE MCBRIDE/NEWSLINE

Bldg. 264 on Fifth Street is the third in a series of replacement buildings constructed at the Laboratory. The building is expected to be ready for occupancy in the spring of 2005.



Newsline  
UC-LLNL  
PO Box 808, L-797  
Livermore, CA 94551-0808